

National Aeronautics and Space Administration



REACH
—NEW—
HEIGHTS

BENEFIT
—ALL—
HUMANKIND

REVEAL
—THE—
UNKNOWN

STEM Presentation
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NASA Marshall Space Flight Center



STEM



What is STEM?

- A focused effort to create a sustained and competitive capability in the areas of Science, Technology, Engineering and Math
- In the US this is a national effort that engages across all of society, especially minorities and underrepresented groups.

Why is STEM important?

- To compete in a global market place of ideas, products, influence, establishing a strong national capability in the areas of STEM is critical
- To provide a path for leadership in many areas and all levels both at home and internationally

STEM and Space



Having a presence in space is beneficial to industry, government, and the nation

Space is a difficult area in which to work

- Requires time, capability, visionary leadership and persistence
- Requires collaboration internally and externally
- Requires funding sources to understand the value of being in space
- For a public effort, such as ours is, requires support of the general population for a sustained effort

A strong STEM focus establishes a foundation for all of these requirements. Without STEM, getting to space is a transient effort at best.

What does STEM for Space look like?



Education

- Early and secondary education - requires working through the school system
- University – requires commitment from institutions to create programs that focus on areas of space expertise
 - Encourage engineering projects that are space related
 - Hire faculty with space engineering expertise
 - Create exchange opportunities with established programs
- Industry – encourage continuing education in space related areas associated with their products
- Be engaged in education opportunities
 - Visit schools, universities
 - Volunteer to teach courses

What does STEM for Space look like?



Public Outreach

- Media – print, television, arts/entertainment
 - Educate the media on the value and excitement of working in space
 - Establish relationships with media members
 - Encourage programing for children and teenagers that focus on STEM areas
 - Make yourself available to the media
- Decision Makers – Political, Captains of Industry, the same thing
 - Educate
 - Relate
 - Encourage
 - Available